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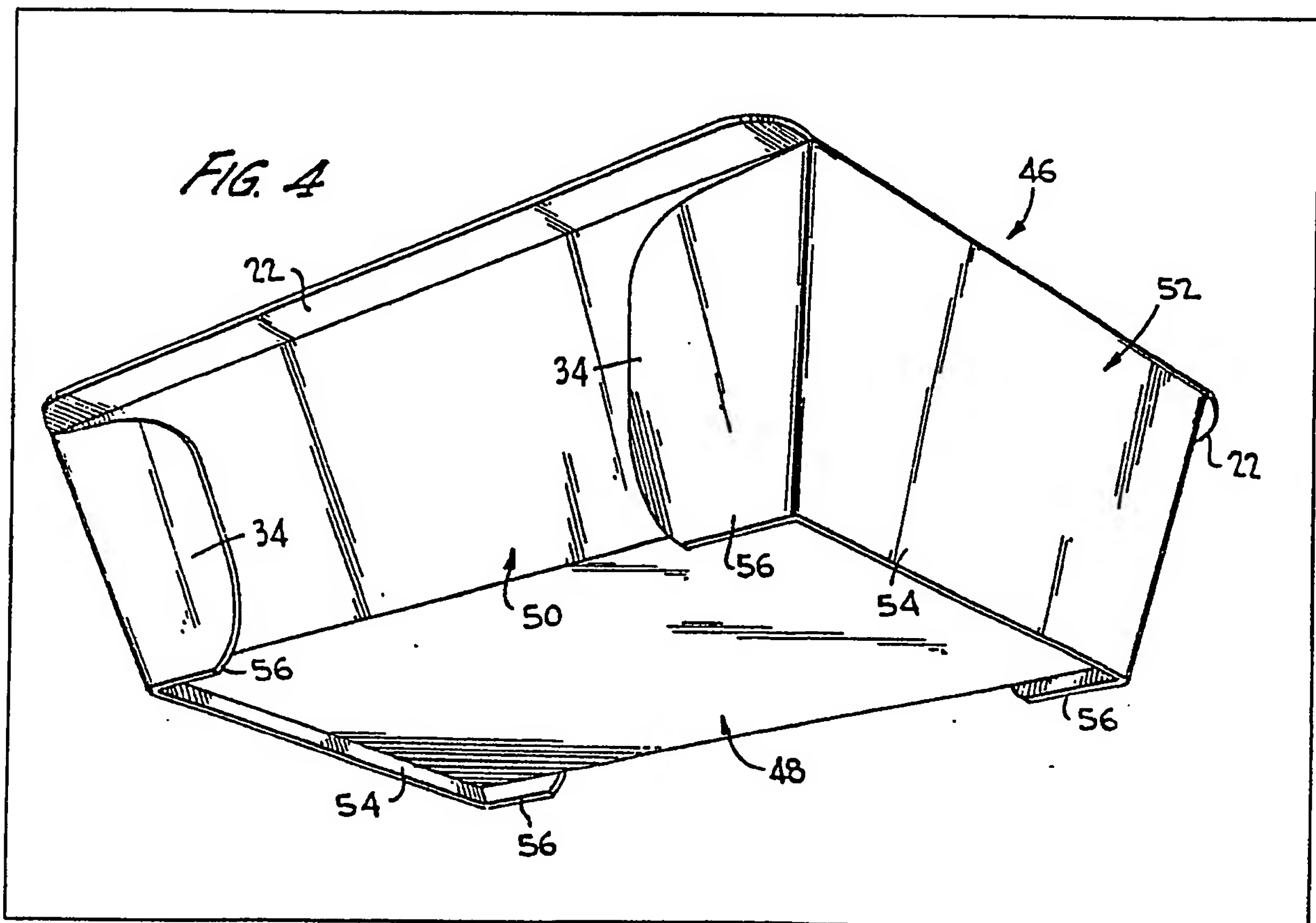
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(54) Baking tray

(57) An ovenable paperboard baking
tray 46 is provided with feet 54, 56 for
supporting the tray in a position

wherein the bottom 48 thereof is
above the supporting surface of an
oven or like heat source. Two of the
opposite sides 52 of the tray have
reverse-folded portions which extend
downwardly below the tray bottom so
as to define feet 54. They also carry
securing flaps 34 which are connected
to the other opposite sides 50 of the
tray to hold the tray erected. Each of
the securing flaps 34 has a lower
portion which extends down below
the bottom of the tray to define further
feet 56. These further feet 56 are
integrally connected to the first-
mentioned feet 54 and at right angles
thereto so as both to provide
additional support surfaces for the tray
and also to reinforce the first-
mentioned feet against deflection.



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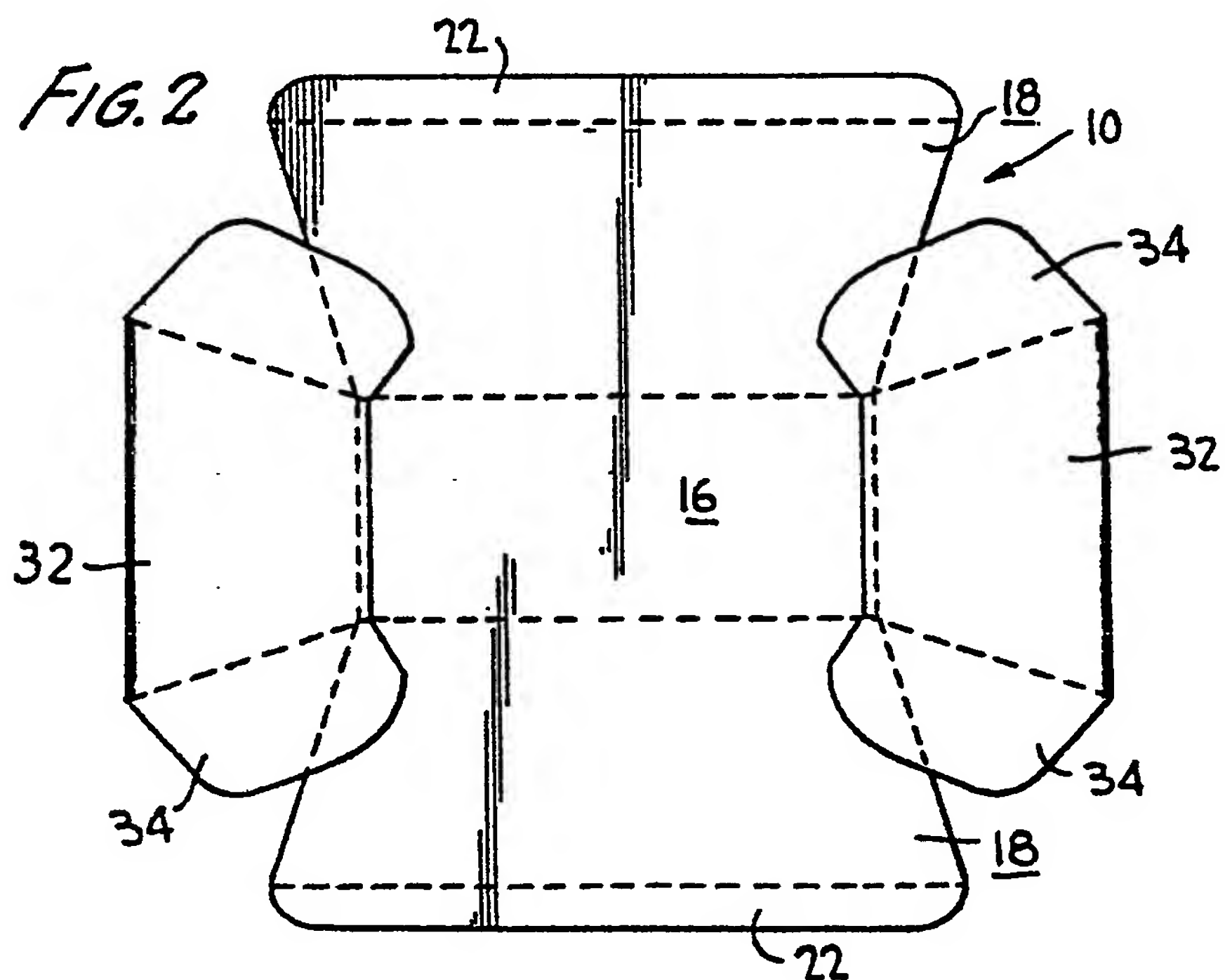
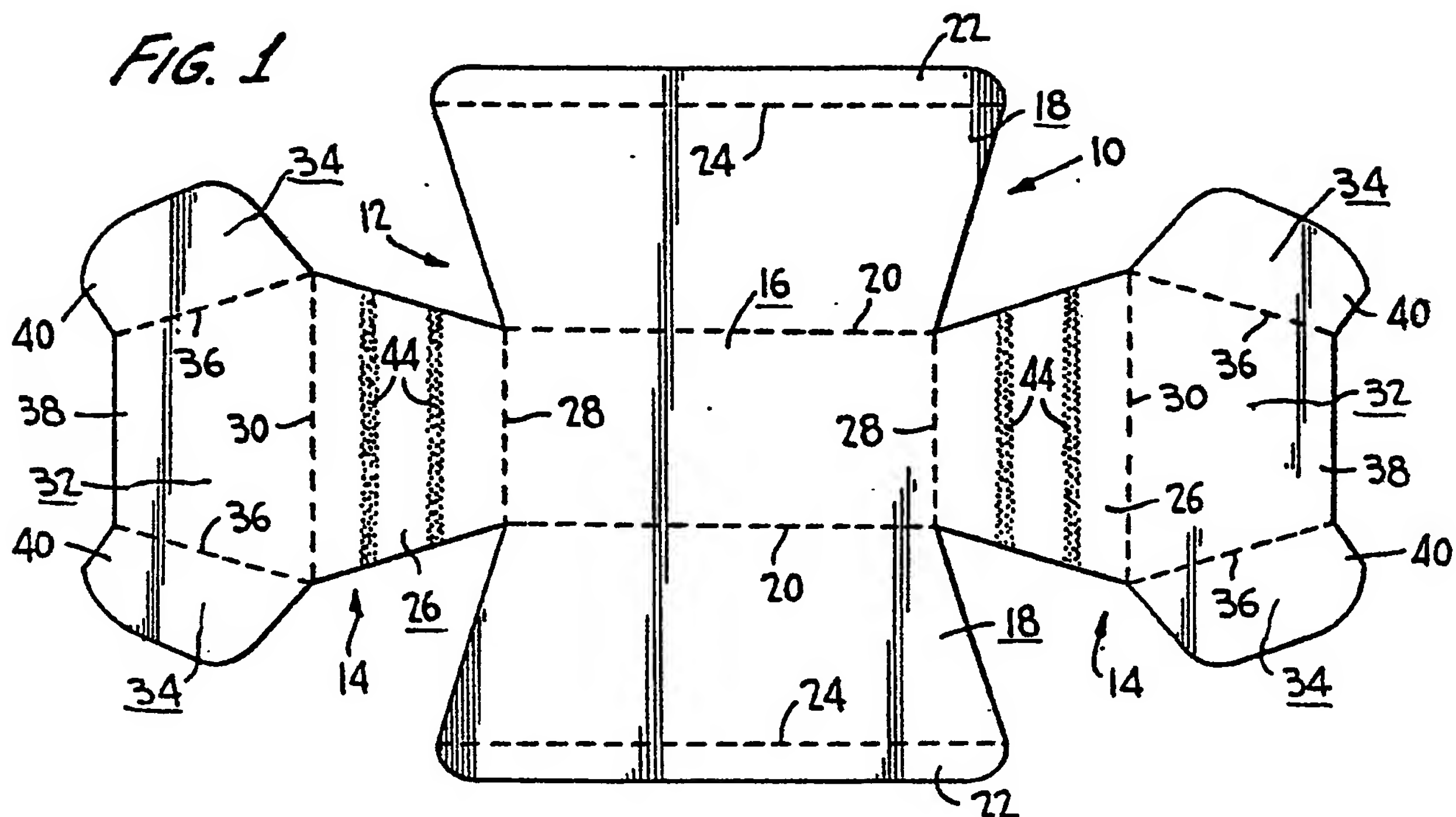


FIG. 3

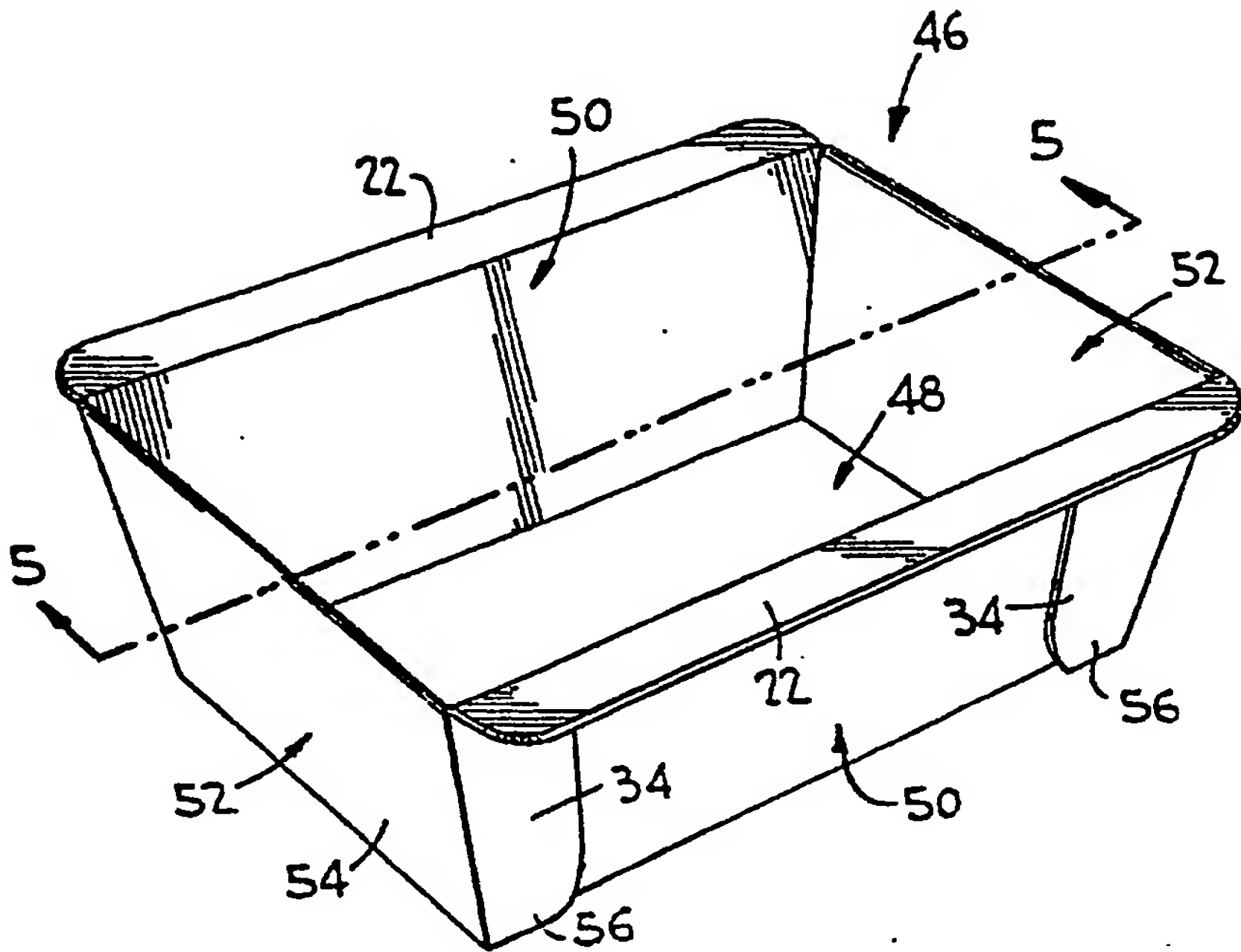
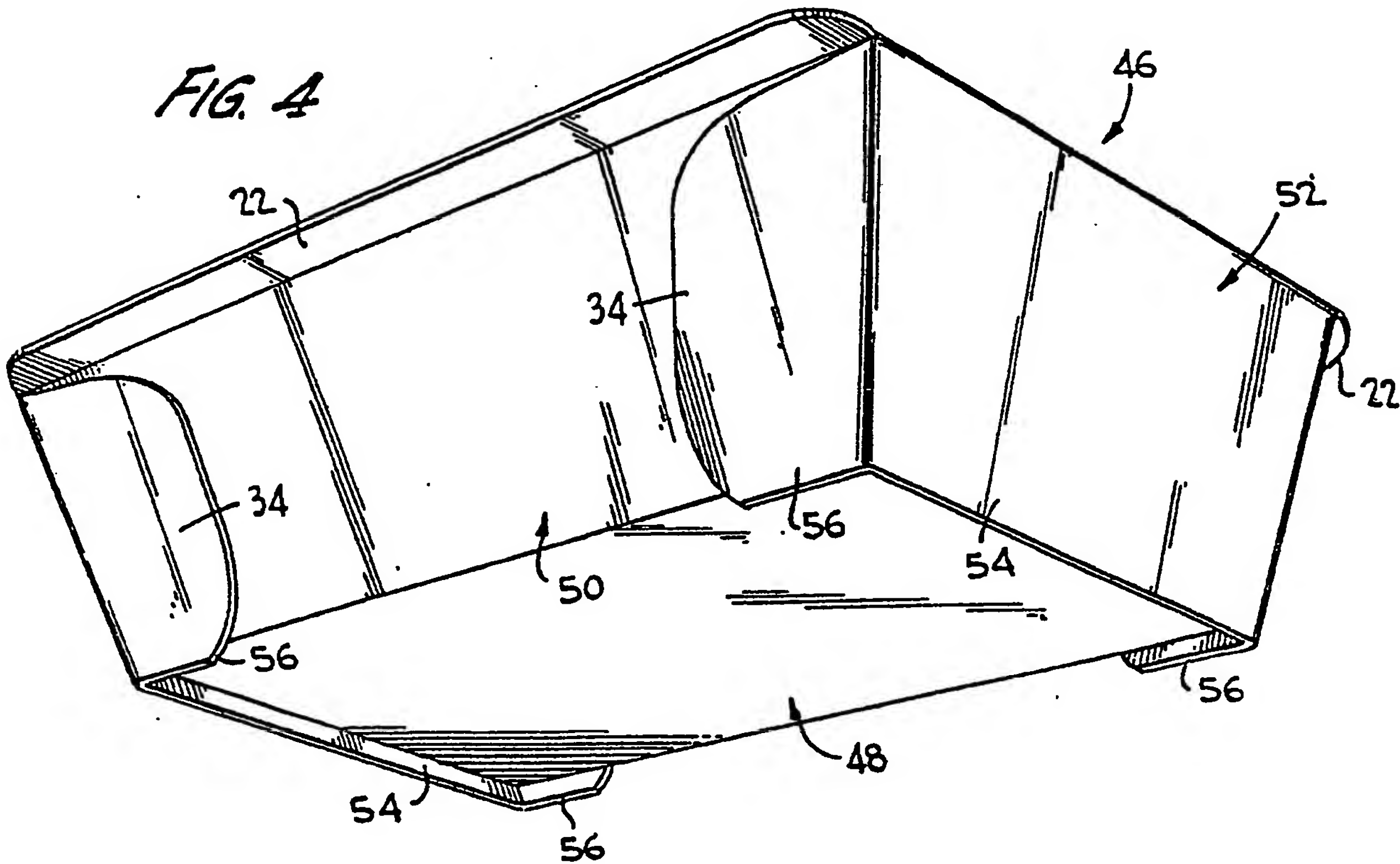
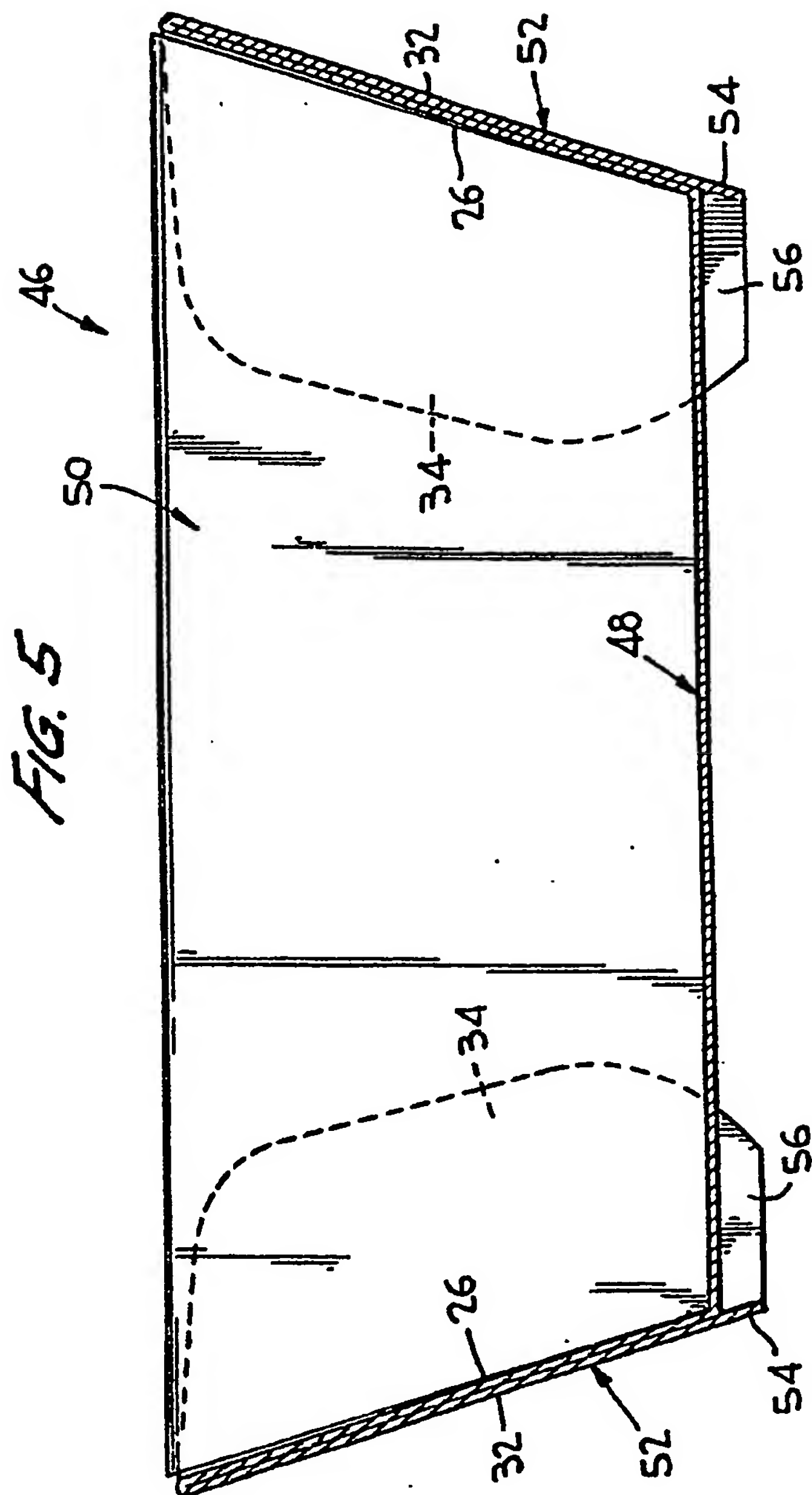


FIG. 4





SPECIFICATION

Footed tray

This invention relates in general to trays made of paperboard or like foldable sheet material, and more particularly (but not exclusively) to such a tray that is ovenable.

In accordance with the invention from one aspect there is provided a footed tray of ovenable paperboard or like foldable sheet material, said tray including two pairs of opposite sides and a bottom, securing flaps carried by one pair of said sides and connecting together said sides, a first pair of said sides being reversely folded to define a depending foot extending longitudinally of each side of said first pair below said bottom, and each of said securing flaps having a depending portion extending below said bottom along each of the other pair of sides to form further depending feet.

The embodiment of the invention particularly described is an ovenable paperboard tray wherein in addition to feet extending down below the bottom of the tray at two ends or sides thereof, there are further feet which extend substantially at right angles to the first feet and along the other sides of the tray. These further feet are integrally connected to the first feet and in addition to aiding in the supporting of the tray, reinforce the first feet. They are provided by securing flaps which secure the adjacent sides of the tray together.

In order that the invention may be more fully understood this embodiment thereof will now be more fully described, by way of example, with reference to the accompanying drawings. In the drawings:—

Figure 1 is an underplan view of the blank from which a tray in accordance with this invention is to be formed;

Figure 2 is a further underplan view of the blank when in a partially folded state ready for shipment to an ultimate user for quick erection;

Figure 3 is a top perspective view of the tray formed from the blank of Figure 1;

Figure 4 is a bottom perspective view of the tray of Figure 3 and shows specifically the details of the feet of the tray; and

Figure 5 is a longitudinal vertical sectional view taken generally along the line 5—5 of Figure 3 and further shows the details of the tray.

Referring now to the drawings, reference is first made to Figure 1 wherein there is illustrated a blank for forming a tray in accordance with this invention, the blank being generally identified by the numeral 10. The blank has a central portion 12 and two end portions 14. The blank central portion 12 includes a central bottom panel 16 and two side panels 18 which are connected to the bottom panel 16 along longitudinal fold lines 20. Each side panel terminates in a flap or ledge panel 22 which is hingedly connected to the adjacent side panel 18 along a further longitudinal fold line 24.

It is to be understood that the illustrated tray will be of a tapered construction and, accordingly, each side panel 18 flares outwardly away from the bottom panel 16.

Each end portion 14 of the blank 10 includes an inner side panel 26 which has a first end thereof hingedly connected to an adjacent end of the bottom panel 16 along a transverse fold line 28. The opposite end of the inner side panel 26 has connected thereto along a transverse fold line 30 an outer side panel 32.

Because of the taper of the tray which is to be formed from the blank 10, the opposite edges of the inner side panel 26 flare outwardly away from the bottom panel 16 while the opposite edges of the outer side panel 32 converge away from the bottom panel 16, as is clearly shown in Figure 1.

A securing flap 34 is hingedly connected to opposite sides of each outer side panel 32 along fold lines 36. It is to be noted that each securing flap 34 has a remote portion which is directly connected to a remote portion of the associated outer side panel 32.

At this time it is pointed out that the dimension of each inner side panel 26 in a direction away from the bottom panel 16 is less than the like dimension of the associated outer side panel 32 so that each outer side panel 32 has a remote portion 38 which in the assembled tray defines a depending foot. The adjacent remote portion 40 of each of the securing flaps 34 also defines a foot, as will be described in detail hereinafter.

At this time it is also pointed out that the under surfaces of the panels 16, 18 and 26 will have a suitable non-stick surface as is conventional in the art.

The blank 10 has adhesive stripes 44 placed on the upperside of the inner side panels 26. Then the outer side panels 32 are folded along the fold lines 30 into overlying relation with respect to the inner side panels 26 as is shown in Figure 2. At this time the securing flaps 34 overlie portions of the side panels 18 and are in position for the folding of the blank 10 to form the erected carton 46 shown in Figures 3—5, in an automatic erecting machine.

Referring now to Figures 3—5, it will be seen that the bottom panel 16 has now formed a bottom wall 48 of the tray 46. The side panels 18 have been folded upwardly to form side walls 50 of the tray 46. In a like manner, the reversely folded panels 26 and 32 have been folded upwardly to form end walls 52 of the tray. Finally, the securing flaps 34 have been folded against the outer surfaces of the side walls 50 at opposite ends thereof and are suitably bonded thereto. In this erected state, the previously identified foot portions 38 of the outer side panels 32 depend below the bottom wall 48 and define feet 54 at opposite ends of the tray 46. Further, the previously identified foot portions 40 on the free edges of the securing flaps 34 now depend below the bottom wall 48 and define further feet 56 at each end of the side walls 50. It is to be noted that the further feet 56 are disposed at opposite ends of each of the transverse feet 54 and are at substantially right angles thereto. Inasmuch as each further foot 56 is integrally connected to its associated foot 54 and since the securing flap 34

of which it is a part is firmly adhered to the adjacent side wall 50, it will be seen that each further foot 56 reinforces the respective foot 54 and thus not only provides for a greater support for the tray 46, but also prevents deflection of the adjacent foot 54.

It is to be understood that in certain instances the tray 46 may be in an oven for a relatively long period of time and that under the advanced heat conditions a single straight-across foot, such as the foot 54, might bend or deflect so as no longer to support the tray 46 and its contents above the supporting surface in an oven or like heating source. However, by simple addition of the feet 56, the supporting of the tray 46 is greatly enhanced and the feet 54 cannot fail.

CLAIMS

1. A footed tray of ovenable paperboard or like foldable sheet material, said tray including two pairs of opposite sides and a bottom, securing flaps carried by one pair of said sides and connecting together said sides, a first pair of said sides being reversely folded to define a depending foot extending longitudinally of each side of said first pair below said bottom, and each of said securing flaps having a depending portion extending below said bottom along each of the other pair of sides to form further depending feet.

2. A tray according to claim 1, wherein said first pair of sides and said one pair of sides are the same pair of sides.

3. A tray according to claim 1, wherein said first pair of sides and said one pair of sides are the same pair of sides, and said further depending feet are directly connected to the first-mentioned feet.

4. A tray according to claim 1, wherein said first pair of sides and said one pair of sides are the same pair of sides, and said further depending feet are directly connected to the first-mentioned feet and substantially at right angles thereto.

5. A tray according to claim 1, wherein said further depending feet are substantially at right angles to the first-mentioned feet.

6. A tray according to claim 1, wherein each side of said first pair of sides includes an outer panel having a free edge portion forming the respective foot, and said securing flaps are carried by opposite edges of said outer panel along at least the free edge portion thereof.

7. A tray according to claim 6, wherein said further depending feet are substantially at right angles to the first mentioned feet.

8. A blank of ovenable paperboard or like foldable sheet material for forming a footed tray, said blank comprising a central portion and an end portion at each of two opposite ends of said central portion, said central portion including a central bottom panel and two side panels, each end portion including an inner side panel joined to an end of said bottom panel and an outer side panel joined to said inner side panel, said outer side panel being of a dimension remote from said bottom panel greater than a like dimension of said inner side panel so as to define a free edge portion

in the form of a foot for the erected tray, and securing flaps carried by opposite edges of said outer side panel and having free edge portions adjacent said outer side panel free edge portion to define further feet for the erected tray.

9. A blank according to claim 8, wherein said further feet are directly joined to opposite ends of the respective first-mentioned foot.

10. A blank according to claim 8, wherein said outer side panels are each folded beneath a respective inner side panel and permanently bonded thereto, and each securing flap underlies an end of a respective side panel ready for erection of said blank to form a tray.

11. A blank adapted for forming a tray as claimed in any claim of claims 1 to 7.

12. A blank, substantially as herein described with accompanying drawings.

13. A tray, substantially as herein described with reference to Figures 3 to 5 of the accompanying drawings.

New claims or amendments to claims filed on 23rd December 1983

Superseded claims 1, 6, 8, 9, 10

New or amended claims:—

1. A footed tray of ovenable paperboard or like foldable sheet material, said tray including a bottom, and a side wall comprising two pairs of opposite sides folded upwardly from said bottom at hinged connections thereto, each side of one of the said pairs being outwardly reverse-folded on itself along an upper edge to provide an outer panel which extends from said upper edge to below said tray bottom, the portion of the outer panel projecting below said bottom forming a depending foot for the tray, a first of said pairs of sides carrying securing flaps which are secured to the adjacent sides of the other said pair to connect the sides together, to securing flaps extending below the said tray bottom along the sides of the other said pair to form further depending feet for the tray.

6. A tray according to claim 2, wherein said securing flaps are carried by opposite edges of said outer panels along at least the projecting portions thereof.

8. A blank of ovenable paperboard or like foldable sheet material for forming a footed tray, said blank comprising a central portion and an end portion at each of two opposite ends of said central portion, said central portion including a central bottom panel and two side panels, each end portion including an inner panel joined to an end of said bottom panel and an outer panel joined to said inner panel, said outer panel being of a dimension remote from said bottom panel greater than a like dimension of said inner panel so as to define a free edge portion in the form of a foot for the erected tray, and securing flaps carried by opposite edges of said outer panel and having free edge portions adjacent said outer side panel free edge portions to define further feet for the erected tray.

9. A blank according to claim 8, wherein said free edge portions of said securing flaps are directly joined to opposite ends of the free edge portions of the respective outer panels.

5 10. A blank according to claim 8 or claim 9,

wherein said outer panels are each folded beneath the respective inner panel and permanently bonded thereto, and each securing flap partly underlies the respectively adjacent side panel

10 ready for erection of said blank to form a tray.